

PATENT**PENDING CLAIMS AS AMENDED**

Please amend the claims as follows:

Claims 1-20. (Canceled)

21. (New) A method comprising:
configuring a front end voice processor to one of a plurality of configurations, each configuration governing a processing of voice features in accordance with at least one back end voice processor design.
22. (New) A method in accordance with claim 21, wherein the configuring comprises configuring the front end voice processor in accordance with a configuration file.
23. (New) A method in accordance with claim 22, further comprising:
receiving the configuration file through a communication link.
24. (New) A method in accordance with claim 23, wherein the communication link is a wireless communication link.
25. (New) A method in accordance with claim 22, further comprising:
determining a current back end design of a back end voice processor in communication with the front end voice processor; and
generating the configuration file corresponding to the current back end design.
26. (New) A method in accordance with claim 22, wherein the configuring comprises:
adjusting at least one adjustable parameter of at least one block of a plurality of blocks comprising the front end voice processor.

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27. (New) A method in accordance with claim 26, wherein the at least one block is selected from the group consisting of:

a DC blocking filter block, a noise suppression block, a FIR filtering on waveform block, a pre-emphasis block, a band energy computation block, a critical band partition block, a critical band weighting block, a FIR filtering of spectrum block, an IIR filtering of log spectrum block, a DCT/PCT/ICT/LDA block, and a combining block.

28. (New) A method in accordance with claim 21, wherein the configuring comprises programming a digital signal processor (DSP) to perform functions of the front end voice processor.

29. (New) A method in accordance with claim 21, further comprising:
processing voice features of a voice sample in accordance with a first configuration corresponding to a first back end voice processor design; and
processing voice features of another voice sample in accordance with a second configuration corresponding to a second back end voice processor design, the configuring comprising changing from the first configuration to the second configuration.

30. A digital signal processor (DSP) for operating within a voice recognition system and programmed to perform functions of a front end voice processor, the digital signal processor comprising:

a plurality of programmable blocks for performing the functions of the front end voice processor, each of the plurality of programmable blocks having at least one adjustable parameter providing a mechanism for configuring the front end voice processor to one of a plurality of configurations, each configuration governing a processing of voice features in accordance with at least one back end voice processor design.

31. (New) A digital signal processor in accordance with claim 30, wherein the configuring comprises configuring the front end voice processor in accordance with a configuration file.

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32. (New) A digital signal processor in accordance with claim 31, wherein the configuration file is received through a communication link.

33. (New) A digital signal processor in accordance with claim 32, wherein the communication link is a wireless communication link.

34. (New) A digital signal processor in accordance with claim 30, wherein at least one block of the plurality of programmable blocks is selected from the group consisting of:

a DC blocking filter block, a noise suppression block, a FIR filtering on waveform block, a pre-emphasis block, a band energy computation block, a critical band partition block, a critical band weighting block, a FIR filtering of spectrum block, an IIR filtering of log spectrum block, a DCT/PCT/ICT/LDA block, and a combining block.

35. A voice recognition system comprising:

a front end voice processor comprising a plurality of programmable blocks for performing voice processing functions, each of the plurality of programmable blocks having at least one adjustable parameter providing a mechanism for configuring the front end voice processor to one of a plurality of configurations, each configuration governing a processing of voice features in accordance with at least one back end voice processor design; and

a current back end voice processor for recognizing words from processed voice features received from the front end voice processor, the processed voice features processed in accordance with a configuration file corresponding to the current back end voice processor.

36. A voice recognition system in accordance with claim 35, wherein the configuration file is received through a communication link between the front end voice processor and the current back end voice processor.

37. (New) A voice recognition system in accordance with claim 36, wherein the communication link is a wireless communication link.

38. (New) A voice recognition system in accordance with claim 37, wherein at least one block of the plurality of programmable blocks is selected from the group consisting of:

a DC blocking filter block, a noise suppression block, a FIR filtering on waveform block, a pre-emphasis block, a band energy computation block, a critical band partition block, a critical band weighting block, a FIR filtering of spectrum block, an IIR filtering of log spectrum block, a DCT/PCT/ICT/LDA block, and a combining block.

39. (New) A method performed in a voice recognition system, the method comprising:

determining a design of a current back end voice processor in communication with a front end voice processor configurable to processes voice features in accordance with a plurality of configurations, each configuration governing a processing of voice features in accordance with at least one back end voice processor design; and

configuring the front end voice processor in accordance with a configuration file corresponding to a design of the current back end voice processor.

40. (New) A method in accordance with claim 39, wherein the determining the design of the current back end voice processor comprises receiving the configuration file through a communication link between the current back end processor and the front end processor.

41. (New) A method in accordance with claim 40, wherein the communication link is a wireless communication link.

42. (New) A method in accordance with claim 39, wherein the configuring comprises:
adjusting at least one adjustable parameter of at least one block of a plurality of blocks comprising the front end voice processor.

43. (New) A method in accordance with claim 42, wherein at least one block of the plurality of programmable blocks is selected from the group consisting of:

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a DC blocking filter block, a noise suppression block, a FIR filtering on waveform block, a pre-emphasis block, a band energy computation block, a critical band partition block, a critical band weighting block, a FIR filtering of spectrum block, an IIR filtering of log spectrum block, a DCT/PCT/ICT/LDA block, and a combining block.